

point towards a surface of the substrate, and the ends are placed a distance apart one or more times the thickness of the substrate, for example, a glass substrate.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number
WO 2004/083111 A1

(51) International Patent Classification⁷: B81C 1/00,
B81B 3/00

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(21) International Application Number:
PCT/NL2004/000197

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(22) International Filing Date: 22 March 2004 (22.03.2004)

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: Dutch

(26) Publication Language: English

(30) Priority Data:
1022995 21 March 2003 (21.03.2003) NL

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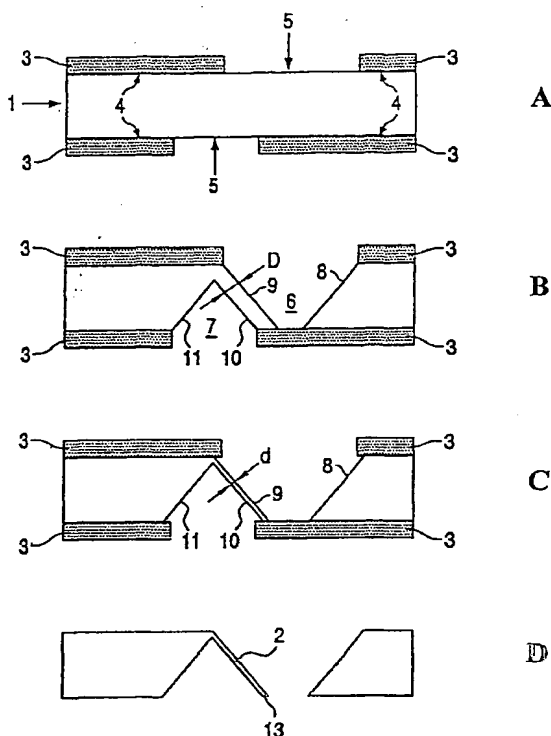
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

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[Continued on next page]

(54) Title: A METHOD FOR MANUFACTURING A MEMBRANE IN A (111) SURFACE OF A (100) SILICIUM WAFER



(57) Abstract: The invention relates to a method for the fabrication of a membrane oriented in a (111) plane of a (100) silicon wafer. To this end the method comprises the following steps: applying a mask to both sides of the wafer, wherein portions of the sides are covered by the mask; and the at least partial removal by etching away silicon material from the portions of the two sides of the wafer that are not covered. This method is characterised in that the etching step substantially removes the silicon material forming recesses in the two surfaces of the wafer, such that the walls of the recesses are formed by (111) planes, and in that not covered portions at both sides of the wafer are aligned in relation to one another such that a (111) plane is formed and the distance d between said two planes is less than the thickness of the silicon wafer, so as to form a membrane in the (111) plane having a thickness d. Such a membrane has many application possibilities in the field of MEMS, for example by dividing the membrane into individual cantilevers.

WO 2004/083111 A1

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